

**MODIS Technical Team Meeting**  
**Thursday, March 22, 2001**  
**3:00 PM**

Vince Salomonson chaired the meeting. Present were Eric Vermote, Mark Domen, Bruce Ramsay, Dorothy Hall, Bruce Guenther, Skip Reber, Bill Barnes, Steve Kempler, Ed Masuoka, Sol Broder, and Wayne Esaias, with Rebecca Lindsey taking the minutes.

## 1.0 Schedule of Upcoming Events

- Terra Cloud Mask Conference  
University of Wisconsin-Madison May 8-9, 2001
- Ocean Color Science Meeting  
San Diego, CA May 22-24

## 2.0 Meeting Minutes

## 2.1 Instrument

Domen reported that the new schedule for Aqua indicated that launch may possibly be delayed until December 20<sup>th</sup>, 2001. Delays are mostly due to spacecraft Formatter Multiplexor Unit (FMU) problems. (The FMU collects data and formats them into packets for transmission to the ground.) There are also problems with transponders and transponder electronics.

The Aqua MODIS instrument is in good shape except for the actuators, which continue to be problematic. The latches have been removed from the space view door and are at Santa Barbara, where they will be replaced with spares. Replacements for the fail safe, which, ironically, failed in testing, have been delivered and are being scheduled for reinstall.

Bruce Guenther showed some charts showing the temperature of Terra MODIS focal planes. The temperature of the intermediate stage cooler from November until now has been under control, and we shouldn't need to outgas any time soon. Temperature increases since the switch to B-side are likely due to solar beta angle.

He also showed examples of how the lunar look data is being used for calibration. He pointed out that the lunar data are matched up for the same months year after year for the life of the mission, i.e. March to March, and April to April. So, we are just starting beginning to receive comparison data. Preliminary results from the lunar data and the solar diffuser show similar degradation trends over time, with degradation being greater at smaller wavelengths. This

degradation is likely due to thin-film solarization, possibly due to UVB. Guenther reported that the characterization team feels that the degradation is manageable, and they will be able to make appropriate corrections.

## 2.2 GES DAAC Update

Kempler reported that the DAAC finished another complete week, but there has been some missing data from EDOS and science server problems in the archive. They are a couple days behind leading edge of the data stream. He also reported that they have developed a FAQ page, and he will be sending an email out telling the team where to find the page.

Kempler also reported that he had developed a proposal for handling software requests. Salomonson indicated that not all the legal issues had been settled, but that it would be good to discuss the proposal.

## 2.3 MODAPS Update

Masuoka reported that they are finishing up production of 16-day products up through January 16 on V1. Day 17 forward will be produced on V2. They are checking out science algorithms, and as soon as the disciplines agree that the products are equivalent, they will switch over to V2. The two systems running together are processing at about 1.4x. They have also tested the Linux cluster running 10 processors and retrieving from archive. The cluster ran well, and will be integrated into operations in May.

He also reported that he had been participating in the discussions among the instrument teams on how to allocate the \$4M set-aside for new funds for improvements at the DAACs. A final draft will be coming from Graham Bothwell that integrates the different teams' requests. Masuoka also indicated that the team plans to come up with a paper that says where this funding leaves us as far as all our needs. Masuoka also mentioned that there might be additional funds available for addressing distribution, data product subsetting tools, etc.

## 2.4 Cryosphere Update

Hall reported that she had participated in a meeting with the National Park Service. They are interested in getting more involved in remote sensing and in particular they are interested in Terra and Landsat data. Hall felt that they are really interested in it, and if there was some good outreach to those people, they might become really involved in remote sensing for park management purposes. Salomonson suggested that Hall mention it to David Herring. Hall also reported that George Riggs had been to a CMG meeting, and he said that they have decided to use the 5km CMG, which is good news.

## 2.5 NOAA/NESDIS

Ramsay reported that Gene Legg, Office of Satellite Data Processing and Distribution (OSDPD), gave an Information Briefing to the NOAA/NESDIS Satellite Products and Services Review Board (SPSRB) on "EOS Prototype Operational Instruments", including MODIS. Issues highlighted included: specific MODIS products will be added to the NWS Requested Operational Products and Services List for monitoring and implementation; OSDPD is ready to flow some of the products to ORA for evaluation and validation; and several other sources of funding are possible if the proposal is not approved in whole or in part, including the IPO.

Legg indicated that the NESDIS proposal to the NOAA High Performance Computing and Communications program for the upgrade of the NESDIS MODIS data communications and processing system seemed to have been favorably received, although no formal decision has been reached nor announced. Salomonson asked whether a plan was in place to ensure that the MODIS team approved the products before they were used operationally. Ramsay stated that, per previously provided contacts identified by NASA, there will be a MODIS Science Team representative on each of the appropriate SPSRB Product Oversight Panels who will advise on when the products are of sufficient quality to distribute. The three designated MODIS Science Team members who will advise on MODIS products are Dr. Wayne Esaias for Ocean products, Dr. Eric Vermote, for Land products, and Dr. Bill Ridgway for Atmospheric products.

## 2.6 Oceans Update

Esaias reported that he attended an NPP meeting, and it is becoming increasingly important that information become publicly disclosed. In addition he reported that Paul Menzel had received funds to help Raytheon develop MODIS algorithms for use with VIIRS. He indicated that similar activities were needed for other products and that we need to identify resources to make that possible. The team also discussed how to handle any requests for help to SDST from VIIRS.

## 2.7 General Discussion

The meeting concluded with a discussion of Steve Kempler's proposal for handling software distribution. Masuoka indicated that the starting point is that we are required to distribute for science or outreach purposes, but commercial requests may need to be handled differently.

# 3.0 Action Item

3.1 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.

Status: Open.

3.2 Masuoka to send Mark Gray a copy of the code-porting guide for MODAPS's transition to Linux.

Status: Closed.